

CLAIMS

What is claimed is:

1. An apparatus for use with a Behind The Ear Implantable Cochlear Stimulation system, comprising:

an earhook configured to be removably attachable to a Behind The Ear (BTE) unit of an Implantable Cochlear Stimulation (ICS) system;

a bendable, formable stalk attached to the earhook for directing the microphone to the inside of an ear; and

a microphone assembly attached to the stalk.

2. The apparatus of Claim 1, wherein the microphone is configured to be electrically connected to a speech processor of the ICS system.

3. The apparatus of Claim 2, wherein the microphone includes three terminals and wherein the microphone is configured to be electrically connected to the speech processor using three conductors.

4. The apparatus of Claim 3, wherein the three conductors include a first conductor, a second conductor, and a third conductor, and wherein the first conductor is connected to a mating connector and wherein the second and third conductors are connected to a bias setting resistor.

5. The apparatus of Claim 1, wherein the microphone assembly further comprises a filter at the distal end of the microphone assembly, wherein the filter seals the microphone from the environment.

6. The apparatus of Claim 1, wherein the stalk is formed of shrink tubing.

7. The apparatus of Claim 1, wherein the microphone assembly further includes a sleeve and wherein the microphone resides in the sleeve.

8. An apparatus for use with a Behind The Ear (BTE) Implantable Cochlear Stimulation (ICS) system, comprising:

a microphone;

means for electrically connecting the microphone to the BTE ICS system; and

means for securing the microphone wherein the microphone receives sound waves through a port, and wherein the microphone is secured so that when the earpiece of a communications handset is held to the ear, the port is open to the volume between the earpiece and the ear.

9. The apparatus of Claim 8 wherein the communications handset is a telephone handset.

10. The apparatus of Claim 8 wherein the means for securing the microphone comprises a stalk adapted to connect the microphone to the BTE ICS system.

11. The apparatus of Claim 10 wherein the stalk is adapted to be bendable and to retain the bend once bent, thereby adjusting the position of the microphone.

12. The apparatus of Claim 10 wherein the stalk is adapted to connect

the microphone to an earhook, and wherein the earhook is removably attachable to the BTE ICS system.

13. The apparatus of Claim 12 wherein the earhook is removably attachable to a coaxial connector attached to the case of the BTE ICS system.

14. An apparatus for use with a Behind The Ear (BTE) Implantable Cochlear Stimulation (ICS) system, comprising:

a microphone, wherein the microphone converts audio sounds into electrical signals which are processed by a speech processor to generate signals provided to an implantable circuit adapted to generate electrical pulses to stimulate nerves in the cochlea;

means for positioning the microphone to receive sound from a volume between an ear and the earpiece of a communications handset held to the ear; and

means for electrically connecting the microphone to the speech processor.

15. The apparatus of Claim 14, wherein the speech processor is a Behind The Ear (BTE) speech processor and wherein the means for positioning the microphone comprises a stalk adapted to connect the microphone to the BTE speech processor.

16. The apparatus of Claim 15, wherein the stalk is adapted to be bendable and to retain a bent shape.

17. The apparatus of Claim 16, further including an earhook wherein the stalk connects between the microphone and the earhook, and wherein the earhook is removably attachable to the BTE speech processor.

18. The apparatus of Claim 17, wherein the earhook is removably attachable to a coaxial connector attached to the case of the BTE speech processor.

19. The apparatus of Claim 14, wherein the microphone includes a port, wherein when the earpiece of the communications handset is held to the ear, the port is open to the volume between the earpiece and the ear.

20. The apparatus of Claim 19 further including a filter between the port and the microphone.